Route 645 Stringfellow Road
Fairfax County

Project Number:	0645-029-384, PE 101, RW 201, C501
PPMS No:	60864
From:	Rte. 50
To:	Rte. 7735
Jurisdiction:	Fairfax County

Project Description

This project consists of widening the existing 2-lane roadway to a 4-lane divided urban minor arterial facility with sidewalks and trails, curb and gutter and a raised median from Route 50 to Route 7735 Fair Lakes Boulevard. The short section from Route 50 up to the Chantilly High School has already been upgraded to four lanes but will remain within the limits of this project for now, in order to ensure the typical section conforms to the proposed section for the rest of the road. Average daily traffic volume is 21,000 vehicles (2003) and the posted speed is 35 mph. The section of Stringfellow Road south of Interstate 66 down to Route 29 was constructed by Fairfax County DOT to provide four lanes in the 1990's.

The project passes through a densely populated residential corridor, which includes several public facilities including a library, schools and parks as well as several stream crossings. In addition the corridor has major utilities including a newly installed 24" water main, several large bore aviation fuel pipelines that serve Dulles International Airport's fuel farm, as well as the other standard utilities.

Project Background

Stringfellow Road has been indicated as a 4-lane divided roadway on the County's Comprehensive Plan since early 1970's. The proposed road improvements were part of the VDOT six-year secondary plan Fairfax County since the 1990's. It was removed from the SSYP due to the funding shortfall in 2001, but was reinitiated in the SSYP during FY 2004 update. Currently this project is part of the Fairfax County BOS 4-year transportation plan with $16 M provided by the November 2004 Bond Referendum primarily for the design and right-of-way acquisition.

In mid 1990's the County initiated a project to provide a left turn lane into the entrance of Greenbrier Park ball fields. This project was cancelled later due to the lack of funding for gas line relocation. Evaluation of the need for the turn lanes into the park as well as improvements to the ball fields parking will also be a part of the current project.

The Countywide Trails Plan calls for the trail on the east side of Stringfellow Road, connecting to the trail along Fair Lakes Parkway, and to the Stream Valley trail along Big Rocky Run.

Purpose and Need Statement

This section of Stringfellow Road connects two principal arterial roads, Route 50 and Route 29 and currently experiences severe congestion in both the north- and south-bound directions during peak periods. The project has been initiated to address the need to increase the capacity on this section of road due to the extensive growth in the corridor and the resulting increase in traffic congestion.

Project Funding & Estimates

Currently the Secondary System Construction Program for FY004-09 indicates State Funds allocated for this project. However, in keeping with current policy for utilizing federal funds, Central Office has indicated that the project will be federalized.

Estimate Type	Estimated Cost per Phase (in Thousands of Dollars)			
	PE	R/W	CN	Total
SSYP	$3,000,000	$15,000,000	$19,000,000	$37,000,000

Design Data

- Geometric Design Standards –Urban Minor Arterial Street System – (GS-6)
- 12 ft. lane width
- 16’ median width
- Existing ADT: 21,000 – (2003 Count)
- 45 MPH design speed
- Asphalt concrete pavement
- 10 ft. multi purpose trail width
- 5 ft. sidewalk width
- 95 ft. proposed RW width

Design Considerations

Roadway Plans:

A consultant designer will be procured for the project.

Survey:

A complete location and design survey with utility designation is currently underway. District surveyor is to provide details of survey activities, including delivery schedule.

Drainage:

In addition to roadway storm water management activities there will also be detailed H&H design activities on this project. There are several streams along the alignment with one major drainage structure over Rocky Run consisting of quad CMP pipe culverts.

Environmental Considerations/Issues:

The project passes over several streams and adjacent public parks and recreation areas. There is one structure over Rocky Run Stream mentioned above. The State Environmental Review Process (SERP) was completed on March 21, 2005. Based on the current federal funding, an environmental document will be necessary and it be prepared by VDOT in-house staff.

Right of Way & Land Development Issues:

The adjacent land use consists of residential, public parks and recreation areas, schools and a library. The right of way width varies along the corridor but initial inspection shows significant width available throughout the project length. However, it may not be sufficient for the utility relocation and (if needed) sound walls.

Utilities:

Numerous utilities exist along the corridor including overhead and underground telephone lines, fiber optic lines, cable TV lines, power lines, gas lines and several major petroleum pipelines. Fairfax Water is currently installing a 24-inch water main along Stringfellow Road. Without the benefit of Roadway Plans, the water main was located as far to the edge of the right of way as possible. Fairfax Water has provided VDOT with the water main construction plans and have promised to provide ‘as built plans’ when they become available.

Pavement/Geotechnical:

NOVA District Materials staff will perform the necessary subsurface investigations and provide pavement designs as required.

Traffic Engineering:

There are currently five traffic signals within the project limits. A new signal proposed for Chantilly High School will be installed prior to this project.

Transportation Planning:

- Provide current traffic volumes (ADT).
- Traffic Data will be required for the design year (Ad date + 22 years)
- Assuming federal funding remains for construction, inclusion in the TIP and STIP will be required

Construction Issues:

This project will be constructed under contract, and it will be advertised as a RAAP.